



UNITED STATES DEPARTMENT OF COMMERCE  
The Assistant Secretary for Science and Technology

December 2, 1974

STATINTL

Mr. E. Ivanov  
Head of Foreign Relations  
Department of Gosstandart  
State Committee for Standards  
of the Council of Ministers of the USSR  
Leninski pr., 9  
Moscow M 117049, U.S.S.R.


Dear Mr. Ivanov:

With respect to item 1.6 (Standardization in the field of corrosion protection) in the U.S.-U.S.S.R. standards exchange program, I have enclosed (1) an annotated list of 19 corrosion standards developed by the National Association of Corrosion Engineers (NACE) and (2) descriptive cover pages of 18 corrosion standards produced by the American Society for Testing and Materials (ASTM).

We would be happy to send you upon request copies of any or all of the standards described in the NACE list or ASTM cover pages as well as any standard to which reference is made in the ASTM cover pages.

Also enclosed are copies of (3) Military Standardization Handbook on Corrosion and Corrosion Protection of Metals and (4) Military Standard 171C (MR) entitled Finishing of Metal and Wood Surfaces.

Sincerely,

  
F. L. LaQue  
Deputy Assistant Secretary  
for Product Standards

Enclosures

**\*DOC Exemption Letter In ERU File\***



NACE Standards Related to Item 1.6 of the  
US/USSR Exchange Agreement

1. NACE Standard TM-02-74 Test Method: Dynamic Corrosion Testing of Metals in High Temperature Water.

This standard method of test is intended to increase the utility and reliability of high temperature aqueous corrosion data. The Standard is also intended to aid users of such data by indicating how the data were obtained and the possible limitations for application to selection of materials or environmental conditions for high temperature water systems.

2. NACE Standard MR-01-74 Material Requirements: Recommendations for Selecting Inhibitors for Use as Sucker Rod Thread Lubricants.

This Standard defines requirements for inhibited lubricants and suggests types of tests that may be used to select such materials.

3. NACE Standard RP-01-74 Recommended Practice: Corrosion Control of Electric Underground Residential Distribution Systems.

This NACE Standard presents procedures and practices for the effective control of external corrosion on buried or submerged metallic components of electrical underground residential distribution systems, to be called URD systems in this document.

4. NACE Standard RP-02-74 Recommended Practice: High Voltage Electrical Inspection of Pipeline Coatings Prior to Installation.

This standard covers detection and correction of defects in protective coatings by high voltage electrical inspection of pipeline coatings prior to installation.

5. NACE Standard MR-02-74 Material Requirements: Material Requirements in Prefabricated Plastic Films for Pipeline Coatings

This standard establishes material requirements of four types of prefabricated plastic films used for pipeline coating. It is intended that this Standard provide a basis for identification of these pipeline coatings by external parties.

6. NACE Standard RP-01-69 Recommended Practice: Control of External Corrosion on Underground or Submerged Metallic Piping Systems

The purpose of this Recommended Practice is to present procedures and practices for achieving effective control of external corrosion on buried or submerged metallic piping systems. These recommendations are also applicable to many other buried or submerged metallic structures. The Recommended Practice describes the use of electrically insulating coatings, electrical isolation and cathodic protection as corrosion control methods.

7. NACE Standard RP-01-70 Recommended Practice: Protection of Austenitic Stainless Steel in Refineries Against Stress Corrosion Cracking by Use of Neutralizing Solutions During Shut Down

This standard examines the varying procedures used by industry to protect austenitic stainless steel equipment while idle.

8. NACE Standard RP-01-72 Recommended Practice: Surface Preparation of Steel and Other Hard Materials by Water Blasting Prior to Coating or Recoating.

This NACE Standard presents specific data on the time factors involved in the cleaning of coated and uncoated steel by the water blast method and makes specific recommendations for safety precautions which must be observed.

9. NACE Standard RP-02-72 Recommended Practice: Direct Calculation of Economic Appraisals of Corrosion Control Measures.

This Recommended Practice establishes standard methods for economic appraisal of alternate corrosion control measures. Use of the calculation schedules in this Recommended Practice should permit the corrosion engineer to prepare an acceptable corrosion control proposal.

10. NACE Standard RP-03-72 Recommended Practice: Method for Lining Lease Production Tanks with Coal Tar Epoxy.

This Standard covers the application of interior, protective, coal tar epoxy lining for lease production tanks.

11. NACE Standard RP-04-72 Recommended Practice: Methods and Controls to Prevent In-Service Cracking of Carbon Steel (P-1) Welds in Corrosive Petroleum Refining Environments.

This Recommended Practice establishes a weld hardness limitation to prevent in-service cracking of welds on P-1 steel equipment used in the refining industry. Information is also given on the three primary factors believed related to in-service cracking of carbon steel welds. These factors are corrosive environment, hardness, and total stress.

12. NACE Standard RP-05-72 Recommended Practice: Design, Installation, Operation, and Maintenance of Impressed Current Deep Groundbeds.

This Recommended Practice presents procedures and practices for design, installation, operation and maintenance of deep groundbeds as applied to the control of external corrosion of underground or submerged metallic structures by impressed current cathodic protection.

13. NACE Standard RP-02-73 Recommended Practice: Handling and Proper Usage of Inhibited Oilfield Acids.

This Recommended Practice suggests some guidelines that can be followed to solve corrosion problems including general corrosion, pitting, and stress cracking and to determine presence or absence of corrosion inhibitors in 15% or less hydrochloric acid

tests procedures which can be used in determining the solubility-dispersibility of corrosion inhibitors in oilfield acids.

14. NACE Standard TM-01-72 Test Method: Antirust Properties of Petroleum Products Pipeline Cargoes.

This Standard describes a test method used to determine the antirust properties of gasoline and distillate fuels in preparation for moving them through product pipelines.

15. NACE Standard TM-01-73 Test Method: Methods for Determining Water Quality for Subsurface Injection Using Membrane Filters.

This Standard describes two test methods for evaluating water quality for subsurface injection: Procedure A-"Rate vs Cumulative Volume" (for water quality monitoring) and Procedure B-"Suspended Solids Test" (for diagnosis or monitoring). The methods are intended to provide standardized water quality test procedures to help determine injection water quality in the petroleum production industry. The test methods describe the apparatus required, test conditions, test procedure, reporting procedures and supplementary tests.

16. NACE Standard TM-01-71 Test Method: Autoclave Corrosion Testing of Metals in High Temperature Water.

This standard method of test is intended to increase the utility and reliability of high temperature aqueous corrosion data. The Standard is also intended to aid users of such data by indicating how the data were obtained and the possible limitations for application to selection of materials or environmental conditions for high temperature water systems.

17. NACE Standard TM-02-70 Test Method: Method of Conducting Controlled Velocity Laboratory Corrosion Tests.

This test method describes a procedure for conducting controlled velocity corrosion tests in the laboratory in which a corrosive solution may be moved at a known tangential velocity across the face of corrosion test specimens. The test method is useful in comparing the effects of the velocity of a solution on the corrosion of a number of metals at the same time, utilizing small circular metal samples.

18. NACE Standard TM-01-69 Test Method: Laboratory Corrosion Testing of Metals for the Process Industries.

This Standard describes the factors which influence laboratory tests. These factors include specimen preparation, apparatus, test conditions (solution composition, temperature, velocity, aeration, volume, method of supporting specimens, duration of test), methods of cleaning specimens, evaluation of results, and calculation of corrosion rates.

This Standard also emphasizes the importance of reporting test data and provides a check list for reporting test data.

19. NACE Standard RP-01-73 Recommended Practice: Collection and Identification of Corrosion Products.

This Recommended Practice provides guidelines which are applicable to most situations in which corrosion products are to be collected and analyzed, and explains the procedures that should be followed in order to provide the laboratory with valid samples whose examination and analysis can contribute to the solution of the corrosion problem.